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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,149	02/06/2002	Mark W. Kimberlin	D-2978	1374

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EXAMINER

SALDANO, LISA M

ART UNIT

PAPER NUMBER

3673

DATE MAILED: 11/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,149

Applicant(s)

KIMBERLIN ET AL.

Examiner

Lisa M. Saldano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/6/02 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2&3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. New corrected drawings are required in this application because they contain unacceptable margins, and improper numbering and/or characters. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: the last paragraph on page 7 refers to "...high velocity water flow, over the surface 13 on to which it is placed and/or secured." However, the figures do not contain an element labeled 13. Appropriate correction is required.

Claim Objections

3. Claim 13 is objected to because of the following informalities: the applicant claims the limitation comprising "a flexible matting structured to prevent substantial soil loss *from the*

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substantially unvegetated, sloped surface...” Because the claim is independent, the claims should read “from a substantially unvegetated” Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 9-11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Lancaster (5,849,645).

Regarding claim 1, Lancaster discloses an erosion control system 10 comprising a flexible matting adapted to be placed on a sloped, substantially unvegetated surface wherein the matting includes a core layer with components 20,30,40 including a fiber matrix 20. The matting further includes an upper layer 50 bonded to the core layer wherein the core and upper layers define a substantially flat upper surface (see Fig. 4).

Regarding claim 9, Lancaster discloses the erosion control system as described above wherein the fiber matrix comprises a material selected from the group consisting of coconut fibers, flax fibers, polypropylene fibers and combinations thereof (see column 2, lines 31-35).

Regarding claims 10 and 11, Lancaster discloses the erosion control system as described above wherein the upper layer 50 comprises a geogrid (see Figs. 5A, 5B and column 4, line 64 through column 5, line 4).

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Regarding claim 12, Lancaster discloses the erosion control system as described above wherein the biaxial geogrid is stitch bonded with the core layer (see column 5, lines 23-28).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lancaster as applied to claim 1 above. Regarding claims 2-8, Lancaster discloses the erosion control system as described above, which comprises a flexible matting. However, Lancaster fails to explicitly disclose the density of the matting, the roughness of the upper surface of the matting, a range of velocities for liquid flow on the matting and a range of durations for liquid flow exposure. It would be obvious to one of ordinary skill in the art to have developed the features claimed by the applicant from Lancaster's inventions because although Lancaster does not explicitly disclose these matting characteristics, they are in the range of characteristics for the inventions disclosed by Lancaster. For example, Lancaster discloses that the flexible matting may comprise various core materials, i.e. coconut fibers and recycled fibers. These, as well as other fibers, would have varying densities that also provide a range of densities for the overall flexible matting itself. Therefore, it is possible to use the materials disclosed by Lancaster in his invention to achieve

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the range of densities claimed by the applicant. Furthermore, the characteristics disclosed by Lancaster may also be used to achieve the roughness, and velocity and exposure durations claimed by the applicant.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lancaster (5,849,645). Lancaster discloses an erosion control system 10 comprising a flexible matting adapted to be placed on a sloped, substantially unvegetated surface wherein the matting includes a core layer with components 20,30,40 including a fiber matrix 20. The matting further includes an upper layer 50 bonded to the core layer wherein the core and upper layers define a substantially flat upper surface (see Fig. 4). However, Lancaster fails to explicitly disclose the density of the matting, the roughness of the upper surface of the matting, a range of velocities for liquid flow on the matting and a range of durations for liquid flow exposure.

It would be obvious to one of ordinary skill in the art to have developed the features claimed by the applicant from Lancaster's inventions because although Lancaster does not explicitly disclose these matting characteristics, they are in the range of characteristics for the inventions disclosed by Lancaster. For example, Lancaster discloses that the flexible matting may comprise various core materials, i.e. coconut fibers and recycled fibers. These, as well as other fibers, would have varying densities that also provide a range of densities for the overall flexible matting itself. Therefore, it is possible to use the materials disclosed by Lancaster in his invention to achieve the range of densities claimed by the applicant. Furthermore, the characteristics disclosed by Lancaster may also be used to achieve the roughness, and velocity and exposure durations claimed by the applicant.

9. Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lancaster (5,849,645) in view of Sakate et al (5,421,123). Lancaster discloses an erosion control system 10 comprising a flexible matting adapted to be placed on a sloped, substantially unvegetated surface wherein the matting includes a core layer with components 20,30,40 including a fiber matrix 20. The matting further includes an upper layer 50 bonded to the core layer wherein the core and upper layers define a substantially flat upper surface (see Fig. 4). Also, the upper layer 50 comprises a geogrid (see Figs. 5A, 5B and column 4, line 64 through column 5, line 4). Lancaster also discloses that the erosion control system comprises a fiber matrix that may include a material selected from the group consisting of coconut fibers, flax fibers, polypropylene fibers and combinations thereof (see column 2, lines 31-35), but may include any commercially available fibers. Commercially available fibers include Sudan grass. However, Lancaster fails to disclose that the flexible matting of the system is effective at releasing nutrients to the subsurface.

Sakate et al disclose a vegetation mat M for placement on soil to control erosion that comprises nutrients consisting of general chemical fertilizer, soil improvement material, bark fertilizer and organic and inorganic material. These nutrients can include amounts of potassium, nitrogen and phosphate. It would have been obvious to one of ordinary skill in the art to combine the Lancaster's erosion control system with the nutrient teachings of Sakate et al because subsoil under erosion control systems are commonly used to grow vegetation that will also serve to control erosion of the sloped earth. Therefore, the nutrient teachings provide a means to cultivate and promote the growth of vegetation on the slope.

10. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lancaster (5,849,645). Lancaster discloses an erosion control system 10 comprising a flexible matting adapted to be placed on a sloped, substantially unvegetated surface wherein the matting includes a core layer with components 20,30,40 including a fiber matrix 20. The matting further includes an upper layer 50 bonded to the core layer wherein the core and upper layers define a substantially flat upper surface (see Fig. 4). Also, the upper layer 50 comprises a geogrid (see Figs. 5A, 5B and column 4, line 64 through column 5, line 4). Lancaster also discloses that the erosion control system comprises a fiber matrix that may include a material selected from the group consisting of coconut fibers, flax fibers, polypropylene fibers and combinations thereof (see column 2, lines 31-35), but may include any commercially available fibers. Commercially available fibers include rice straw. Lancaster further disclosed that the upper layer 50 may be made from ultra-violet stabilized plastic materials. Plastic materials includes materials made from polypropylene.

It would have been obvious to one of ordinary skill in the art to apply the use of rice straw fibers in an erosion control system such as the one disclosed by Lancaster because Lancaster states that the system may used any commercially available fiber; that includes rice straw fibers.

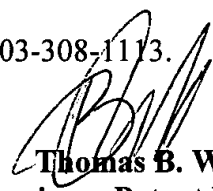
Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Saldano whose telephone number is 703-605-1167. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 703-308-2978. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.



Thomas B. Will
Supervisory Patent Examiner
Group Art Unit 3671
for Heather Shackelford

lms
November 8, 2002

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.